

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 276 554
A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 87310842.7

(51) Int. Cl.4: **B65D 33/24 , B65D 33/25**

(22) Date of filing: 09.12.87

(30) Priority: 27.01.87 JP 17738/87
28.01.87 JP 1102/87 U
29.01.87 JP 1204/87 U
17.03.87 JP 63305/87

(43) Date of publication of application:
03.08.88 Bulletin 88/31

(84) Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE

(88) Date of deferred publication of the search report:
27.09.89 Bulletin 89/39

(71) Applicant: **NIHON TOKKYO KANRI COMPANY LIMITED**
73-2, Honkomagome 5-chome Bunkyo-ku
Tokyo(JP)

(72) Inventor: **Inagaki, Hiromichi**
1-143, Aza Maedaomote
Inuyama-shi Aichi-ken(JP)

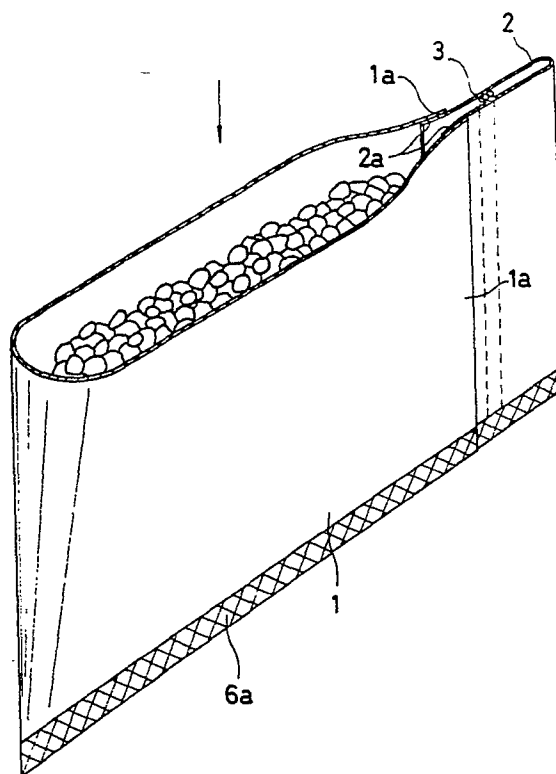
(74) Representative: **King, James Bertram**
Herbert J.W. Wildbore 73 Farringdon Road
London EC1M 3JB(GB)

(54) **Bag with resealable closure and a method of manufacturing same.**

(57) A plastics bag (1) includes a closure means (2) formed from a tape which has been folded into a U-shape about a medial part. The tape includes cooperating profiled strips (3) one of male and the other of female form which engage to form a resealable closure. The free sides (2a) of the tape are heat sealed to the top free edges (1a) of the bag (1). The bag is manufactured by feeding sheet material (1') to a mandrel (11) and simultaneously feeding the closure tape (2) after bending in a former (7) and engaging the closure parts (3) by rollers (8) between the overlapping free sides of the tape (2). The tape (2) is heat sealed to the bag material 1' by means of heat sealing bars (13) and the cylindrical assembly is then heat sealed laterally by means of further heat sealing bars (14). The bag is filled by passing contents down a chute (15) through the middle of the mandrel (11) and by this means forming, filling and closing of the bag may all be carried out as a stepwise automatic operation.

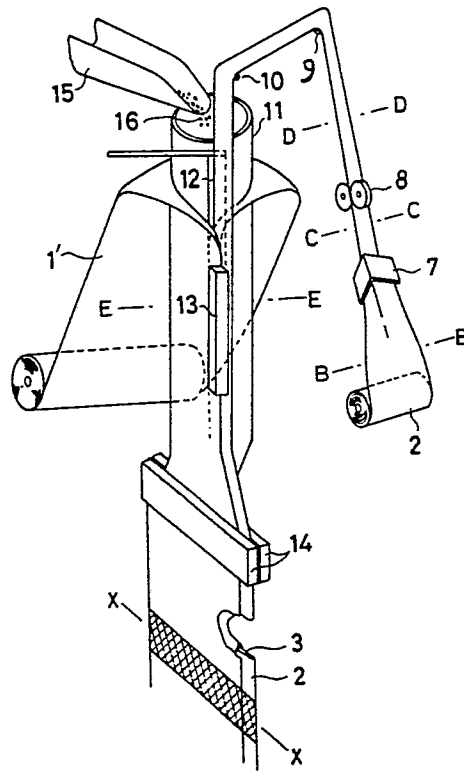
The bags are separated by cutting through the central portion of the heat seal along X-X.

FIG. 6



EP 0 276 554 A3

FIG. 7





EP 87310842.7

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	<u>US - A - 4 615 045</u> (SIEGEL) * Totality; especially fig. 1,2,3; column 2, lines 31-32 *	1,2,3	B 65 D 33/24 B 65 D 33/25 B 65 B 9/20
X	-- <u>US - A - 3 226 787</u> (AUSNIT) * Totality; especially fig. 2,5,6; column 2, lines 10-12 *	1,2	
X	-- <u>US - A - 3 991 801</u> (AUSNIT) * Totality; especially fig. 1,2; column 4, line 29 *	1,2	
A	-- <u>GB - A - 2 054 451</u> (ROEDER IND.) * Fig. 1 *	4,5	
A	-- <u>GB - A - 2 087 828</u> (AUTO WRAPPERS) * Fig. 1,3 *	4,5,6	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
A	-- <u>US - A - 4 617 683</u> (CHRISTOFF) * Totality *	4,5	B 65 D 33/00 B 65 B 9/00 B 65 B 61/00

The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 13-06-1989	Examiner CZUBA
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	